SYNONYMICAL REMARKS UPON NORTH AMERICAN COLEOPTERA.

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In the Annals and Magazine of Natural History, November, 1870, I published some notes made during a rapid examination of various collections in London and Paris; subsequent opportunities enabled me to make some additional notes, and more careful studies of the species which I had not time to investigate on my first visits. These are contained in the present paper, with such corrections of my former notes as seem to be necessary at the present time.

- 1. CICINDELA LONGILABRIS Say. A specimen labelled Bermuda in the Oxford Museum.
- 2. C. MAGDALENÆ. Marked like cinctipennis Lec., but the prothorax is more rugose, the elytra more strongly punctured, and distinctly serrate at tip; in addition to the usual markings, dilated and connected at the margin, there is a basal white spot (as in MACRA), and a subsutural white vitta. Oxford Museum; found in turpentine barrels brought to London, supposed to be from North Carolina.

I have named this species in friendly recollection of Magdalen College, Oxford, the genial influence of which has been experienced by many scientific pilgrims to the University.

- 3. C. lacerata Chaud. from Louisiana, scarcely differs from the Mexican C. HAMATA.
- 4. C. PAMPHILA Chaud. An undescribed species from Texas, of stout form, allied to PALLIFERA. Elytra with the dark spaces strongly punctured, tip very finely almost obsoletely scrrate; last ventral segment ♀ longitudinally impressed and marked with white spots.
- 5. ELAPHRUS AMERICANUS Dej. The type in the collection of Baron Chaudoir is evidently the common species afterwards described by me as *punctatissimus*. There are many other synonyms for the various races which occur in its wide distribution from the Atlantic to the Pacific, and northwards nearly to the Arctic circle.
- 6. Notiophilus aquaticus‡ Kirby. The type in the British Museum does not resemble the European species; it is more brassy

than sibirious, with the strike of the elytra more strongly punetured; the inner rows are less impressed behind; the dorsal fovea is deep; the seutellar strike is deep, and there are four or five small punetures between it and the sutural strike. It seems therefore to be N. SEMISTRIATUS Say.

- 7. Nebria (Helobia) castanipes Kirby, afterwards described as N. moesta Lee., and previously as N. Sahlbergi Dej.
- 8. Calosoma peregrinator Guérin, Rev. Zool. 1844, p. 255; angulatum Lee., prominens || Lee. Resembles lugubre, but is less shining and not so coarsely punetured.
- 9. C. ANGULATUM Chevr. Col. Mex. 1, No. 44. Resembles EXTERNUM in form, but differs in the prothorax being angulated at the sides. Mexico.
- 10. C. armatum Lap. Etudes Entom. 156; C. ALTERNANS Fabr. fide Chaudoir. Antilles.
 - 11. C. fulgidus Gebler, eoll. Mnizseeh. A variety of VIETING-HOVII, with the elytra more coarsely reticulate. Alaska.
 - 12. C. Mæander Fischer; Lapilayi Lap.; Tatumi Motsch. Extends from North America through Kamtschatka to Siberia.
 - 13. C. ligatus ‡ Kirby, the type is C. SERRATUS Say.
 - 14. CYCHRUS INTERRUPTUS Mén. (coll. Chaudoir) is *C. constrictus* Lee.
 - 15. C. ALTERNATUS Motseh. (ibid.) is as large as C. striato-punctatus Chaud., but the elytra are broader, and the prothorax a trifle narrower, with the hind angles more distinctly margined behind; the specimens are \mathfrak{P} , and they seem to belong to the large one having only two joints of the \mathfrak{F} front tarsi spongy beneath.
 - 16. Cymindis marginata Kirby; reflexa Lec.; CRIBRICOLLIS Dej.!
 - 17. C. UNICOLOR Kirby is a small immature specimen of *C. hudsonica* Lee.; the sides of the prothorax are more widely margined than in PILOSA, distinctly sinuate behind, and the hind angles are prominent.
 - 18. C. Venator Dej., according to Baron Chaudoir differs from Americana Dej. My series is not sufficiently large to decide this point.
 - 19. A specimen of TRICHOTHORAX CYANEUS Montr., from New Caledonia, in the collection of Mr. Perroud at Lyons, is very similar to the variety of our Rhombodera pallipes in which the prothorax and legs are yellow.

- 20. Anchomenus angusticollis‡ Kirby agrees with the eommon race of Platynus sinuatus, except that the basal angles of the prothorax are less prominent, the basal impressions and the elytral striæ less punctured. The specimen of P. Stygicus Lec. shown me on a former visit to the British Museum was erroneously labelled, but was not Kirby's type; the synonym given in Annals and Magazine of Nat. History, Nov. 1870, p. No. 5, is therefore incorrect.
- 21. A. EXTENSICOLLIS. Mr. Kirby's specimens belong to the elongate bluish-green race, without any elevation in the basal impressions of the prothorax.
 - 22. AGONUM AFFINE Kirby is Harrisii Lee.
- 23. A. PICIPENNE Kirby. Var. (a) is a species as large as P. RUFICORNIS Lee., with the prothorax equally elongate, and the sides not explanate or reflexed; it seems to be *lutulentus* Lec.
 - 24. A. picipenne, vars. (c and d) are ruficornis Lec.
- 25. A. SORDENS Kirby, (a) could not be found; (b) seems to be fuscescens Chaud.
- 26. A. SEMINITIOUM Kirby. I learn from Mr. C. O. Waterhouse that this species differs from P. CHALCEUS Lee. by the clytra being shorter, more shining, and less parallel at the sides.
- 27. Stereocerus similis Kirby, is the species of Amara described as Feronia hæmatopus Dej.
- 28. CYRTONOTUS RUFIMANUS Kirby has the sides of the prothorax distinctly sinuate behind, and the hind angles prominent. It seems (without eomparison) to be A. lacustris Lee. C. brevilabris Kirby is a specimen of the same species with the labrum retracted under the epistoma.
- 29. C. convexiusculus ‡ Kirby is A. LATICOLLIS Lee. The European species is narrower, with the prothorax much more narrowed behind and more sinuate on the sides, as in A. JACOBINÆ Lee.
- 30. C. LATIOR Kirby is A. libera Lee., = lævistriata Putzeys, a Bradytus with sides of prothorax rounded, hind angles obtuse and not rounded.
- 31. AMARA IMPUNCTICOLLIS Say. Mr. Kirby's specimens have the sides of the prothorax more oblique and less rounded, and the basal foveæ more distinct than in the specimens sent by Mr. Sprague for comparison, but I do not think that it is a different species.
 - 32. A. vulgaris ‡ Kirby, is a rather elongate flattened species

with the basal foveæ of the prothorax double, distinct, and well separated, very feebly punctured; clytra strongly sinuate towards the tip; hind tibia 5 slightly curved, not pubescent on the inner face. It is of the size of interstitials, and very nearly related to it, but more depressed, and with deeper prothoracic basal foveæ, and seems to be what I incorrectly determined as Lævipennis Proc. Acad. Nat. Sci. 1855, 353.

- 33. A. discors Kirby = CHALCEA Dej., has the hind angles of the prothorax sharply defined, the base of the prothorax is not punetured, and the sides not explanate; it seems therefore to be A. CHALCEA Dej.
- 34. A. Lævipennis Kirby is a small species of bright bronze color, with the sides of the prothorax not explanate, basal foveæ distinct, striæ of elytra fine, not deeper behind; antennæ apparently entirely black, hind tibiæ $\mathfrak P$ not pubescent on inner side. Size of European A. communis, but quite distinct. I have described this species as *erratica* Proc. Acad. Nat. Sci. 1855, 353.
- 35. A. Pallipes Kirby. Correctly determined in my eabinet. Narrower and more convex than angustata Say, with the basal fovew very distinct.
- 36. Isopleurus nitidus | Kirby is Amara subænea Lec. The mentum tooth is not emarginate and but slightly impressed at tip.
- 37. I. MACLEAYI Kirby is a Selenophorus allied to S. STIGMOSUS but with the basal angles of prothorax rectangular. Probably from the Antilles, certainly not East Indian.
- 38. MISCODERA AMERICANA Mann. (coll. Chaudoir) is very similar to M. HARDYI Chaud., but is smaller, more bronzed, with more globose and narrower prothorax, and elytral strike still more obliterated.
- 39. DIEELUS SCULPTILIS Say. The more convex and shining northern race of this species has been named intricatus by Baron Chaudoir.
- 40. D. Ambiguus Ferté, not different from opacus Ferté, and reflexus Lec.
- 41. Badister peltatus † Dej. The insect mentioned as the American variety of this species is B. FLAVIPES Lee.
- 42. LICINUS SILPHOIDES. Two specimens of this insect from North American turpentine are in the Oxford Museum. I have seen several which were taken alive in Massachusetts; so that it must be regarded as fairly introduced into our fauna.

- 43. Chlenius fulgiceps Newman, could not be found in the British Museum.
 - 44. C. emarginatus ‡ Kirby, could not be found.
- 45. C. impunctifrons | Kirby, by comparison is C. Pensylvanicus Say.
 - 46. C. chlorophanus Dej. is C. solitarius Say.
- 47. C. cordicollis Kirby is C. chlorophanus‡ Lcc. = C. Lecontei‡ Dej.
- 48. C. quadricollis Kirby is a green variety of TRICOLOR, and not BREVILABRIS Lec., which is not among Kirby's specimens.
- 49. Polpochile Sol. = Melanotus \parallel Dej. = Cratocara Lec. = Phymatocephalus Schaum.
- 50. Harpalus laticollis Kirby on comparison proves to be Antsodactylus nigerrimus Dej., and not A. Harrisii Lec. as incorrectly stated by me in Ann. and Mag. Nat. Hist.
- 51. H. INTERPUNCTATUS Kirby is the species which I have determined (New Species p. 15) as A. NIGRITA Dej., but which Baron Chaudoir considers different, and has named A. Lecontei.
- 52. H. ochropus Kirby agrees with desertus Lec., except that the hind angles of the prothorax are nearly impunctate.
- 53. H. Basillaris Kirby is obesulus Lec. and = Amara externa Walker.
- 54. DICHIRUS BRUNNEUS Dej. (coll. Chaudoir) is like PICEUS in form, but smaller, with the hind angles of the prothorax rectangular and slightly prominent.
- 55. Trechus similis Kirby is the common Agonoderus, with the hind angles of the prothorax rounded; comma Fabr. (fide Zimm. pallipes Say, Dej.)
 - 56. T. flavipes Kirby is Bradycellus rupestris (Say).
- 57. T. ruficrus Kirby is B. cognatus, as correctly observed by Baron Chaudoir.
 - 58. T. immunis Kirby is Stenolophus conjunctus (Say).
- 59. Peryphus conçolor Kirby. On renewed examination this appears to be *Bembidium salebratum* Lec.
- 60. Peryphus picipes Kirby. The specimen is in bad condition, but seems to be of very convex form. It is smaller than 79-78 Sprague, and has the elytral strice very finely punctured.
 - 61. P. SCOPULINUS Kirby is B. gelidum Lec.
 - 62. Notaphus variegatus Kirby is not Versicolor Lcc., but a

smaller species with more convex prothorax more narrowed at the base; it seems to be B. Pictum Lee.

- 63. N. INTERMEDIUS Kirby of the same size as VERSICOLOR, but with the sides of the prothorax distinctly sinuate near the base; seems to be *B. rapidum* Lec.
- 64. N. NIGRIPES Kirby, very similar to Intermedius, but nearly black, with small pale spots and dark legs.
- 65. Tachyta picipes Kirby is T. inornatus (Say) = T. NANUS of Europe, as correctly determined by Schaum, Ins. Deutschl. i.
- 66. Haliplus pantherinus Aubé. The type in the British Museum is a small species resembling immaculicollis in size and color.
 - 67. Colpius inflatus Lee. = Suphis Doubledayi B. M. Cat.
- 68. Suphis Forsteril B. M. Cat., size of gibbulus, but the elytra are very strongly punctured.
- 69. Hydrocanthus Harrishi B. M. Cat., size of gibbulus, but narrower, with the elytra black, finely and obsoletely punctured.
- 70. COLYMBETES PHÆOPTERUS Kirby. S with the last joint of front tarsi not deformed; S sides of prothorax finely margined, very slightly rounded, searcely forming an angle with the elytra, very finely reticulate, somewhat dull; elytra very finely granulatoreticulate, and sparsely punctulate.
- 71. C. BICOLOR Kirby. More regularly elliptical and convex than the preceding, also finely granulato-reticulate, but scarcely punctulate, prothorax similar in form, but not more reticulate in \mathcal{P} than \mathcal{T} ; elytra pale towards the sides. Both species are allied to Agabus discolor.
- 72. C. RETICULATUS Kirby is allied to Agabus arcticus of Europe.
- 73. Colymbetes sinuatus Lec. should be compared with the European C. Graphi, which it closely resembles.
 - 74. Acilius Maccullochii Kirby is mediatus Say.
- 75. Hydroporus exiguus Aubé. Nothing like this is in onr collections.
- 76. Necrophorus Melsheimeri Kirby, evidently the form named *infodiens* Mann. The prothorax is as in *maritimus* of which it is a variety; antennæ with the base of the club black, remaining joints red; elytra with two bands and epipleuræ red.
 - 77. N. Hallii Kirby is orbicollis Say.

- 78. N. hebes Kirby is a variety of VESPILLOIDES; the prothorax is as in MARITIMUS, club of antennæ entirely black, elytra with two bands, the front one extending forwards on the epipleuræ to the humeri, leaving a black portion behind the humerus on the upper side of the epipleura.
- 79. LEIODES PUNCTOSTRIATUS Kirby has the hind tarsi 4-jointed, and is therefore an Anisotoma, and not Hydnobius, as incorrectly stated by Erichson. The punctures of the rows are very large, and those of the alternate spaces also large.
- 80. Pselaphodes Westwood is allied to Tmesiphorus, but differs in form of palpi.
- 81. Sintectus Westwood equals TMESIPHORUS Lec. The Australian species closely resembles T. costalis Lec.
- 82. Aleochara pallitarsis Kirby is a rather large black Homalota, with the prothorax broadly impressed near the base, and feebly channelled; elytra brownish, a little wider than prothorax, finely not densely punetulate and pubescent; abdomen dorsal surface shining, not strongly punctured; antennæ heavy, black, 2d and 3d joints each more than $\frac{1}{2}$ longer than 4th; scape stouter and a little longer than the 2d. A common species.
- 83. Tachyporus acuductus Kirby is VENTRICULUS Say; the right elytron is striated and rugose towards the tip, but the left is uniformly finely punctulate.
- 84. T. Affinis Kirby is nearly of the same form, but less convex; the prothorax very finely, and the elytra very strongly punetulate.
 - 85. OMALIUM PLANIPENNE Mäklin is O. pineti Thomson.
- 86. Distemmus argus is very similar to and perhaps identical with a European species of Omalium.
- 87. OMALIUM MARGINATUM Kirby is an Olophrum with the prothorax sparsely and eoarsely punctured, slightly narrowed behind, hind angles obtuse but distinct, disk moderately convex; elytra very strongly punctured, nearly as long as the abdomen. Described by Macklin under the same name.
- 88. O. sanguineum and perocellatum B.M., from Hudson Bay, are allied to O. CONVEXICOLLE Lec.
- 89. Acidota seriata Lec. is CRENATA (Fabr.) according to Mäklin, Stettin Ent. Zeitung, 1872, 247.
 - 89a. NITIDULA OBSCURA and ossium Kirby is the black immacu-

late species which is not uncommon in the northern parts of the continent.

- 90. N. DISCOIDEA Fabr., Kirby seems to be the Californian Omosita inversa Lec., but the northern specimens are smaller.
- 91. Epuræa Boreella Er., a small narrow black species similar to Nigra Mäklin, common to Europe and North America.
 - 92. Europs Wollaston is Nomophlaus Lee.
- 93. Hesperobænus testaceus. Motsch. is a species of Baetridium, broader than B. NANUM and uniformly testaceous.
- 94. Atomaria atra‡ Kirby is a small convex shining coarsely punctured species; elytra testaceous, legs and abdomen pale yellow. Probably a dark variety of A. LETULA Lec., and not at all like the European A. ATRA.
- 95. Anchomma Lee. Compare with Microtelus Sol. Ann. Ent. Tr., 1838, pl. 1, f. 3.
- 96. Corticaria denticulata Kirby is quite different from C. Serrata of the same collection; it is smaller, nearly black, prothorax broadly and deeply foveate near the base, sides much rounded, regularly and less coarsely serrate.
- 97. Loberts Lec.; a species of this genus from Chili is in the British Museum.
 - 98. Catogenus puncicollis Newm. is not in the British Museum.
- 99. Penthelispa Paseoe (Oct. 1860) is *Endectus* Lee. (May, 1861).
 - 100. MINTHEA Paseoe seems allied to Trogoxylon Lee.
- 101. Hemipeplus marginipennis Lee. seems to be Ochrosanis Dohrnii Paseoe, 1866.
- 102. Elacatis | Paseoe (1860), is Othnius Lee. (1861.) The geographical distribution of this genus is very remarkable; Borneo and United States.
- 103. Thorretus; I saw in Mr. Sallé's collection the only representative of this family thus far found in America; a small species collected in San Domingo.
- 104. Byrrhus picipes Kirby, a rather large species with a transverse submarginal black spot on the elytra behind the middle. It is correctly determined in my synopsis.
- 105. DICHELONYCHA VIRESCENS Kirby is the common northern species with the prothorax tolerably densely punctured, thinly pubescent, feebly channelled; the lateral angles are distinct, the

basal ones well defined acute, but not prominent. It is subvittata of my synopsis, Journ. Acad. Nat. Sc., 2d. ser. iii. 279.

- 106. Melolontha paradoxa Beauvois, according to Sallé, is Rhipidandrus flabellicornis (Sturm).
- 107. The Australian genera Phyllotocus and Macrothops McLeay are related to Oncerus Lec. in form and by the double epistoma.
- 108. Cheiragra McLeay from Australia is allied to Chnaunanthus Burm. and Acratus Horn. The position of the spiracles must be observed in these genera to determine their true affinities.
- 109. Liogenys, Homalochilus, and Hilarianus have the propygidium connate with the fifth ventral as in DIPLOTAXIS, which they resemble in form and sculpture.
- 110. HYPOTRICHIA Lec. and PLECTRODES Horn agree in form and general characters with CLAVIPALPUS, but the last differs in having the ungues alike, and armed with a broad acute tooth. The propygidium is connate with the fifth ventral and the spiracle is placed on the connecting suture; the fifth ventral is elongated.
- 111. LEURETRA Er. resembles CLAVIPALPUS by the fifth ventral being elongated, but the mouth organs are less developed, as in other Pachypodidæ, with which the three genera mentioned in 110 must probably be associated.
- 112. DIPLOTAXIS GEORGLÆ Blanchard (Paris Museum) is similar to D. SUBCOSTATA Blanch. but larger, with the prothorax more sparsely and coarsely punctured, and the interspaces of the elytra flatter and not subcostate behind. D. MOESTA of the same collection seems only an individual variation of SUBCOSTATA, larger than usual, with the punctures of the occiput and prothorax more feeble.
- 113. D. Harperi Blanch. is allied to EXCAVATA, but is ferruginous, with the epistoma rounded, not at all truncate, and frontal carina impressed at the middle.
- 114. D. frondicola † Blanch. is also ailied to EXCAVATA, black, with the elytra a little more rugosely punctured; seems only an individual variety.
- 115. D. punctato-rugosa Blanch. is EXCAVATA Lec. The form is not "breviter ovata" as described, and the upper tooth of the front tibia is feeble. The description being erroneous, the name should be dropped into synonymy.

- 116. Ancylonycha profunda Blanchard seems to be $Lachnosterna\ rugosa\ Lee.$
- · 117. A. brevicollis Blanch. is a race of L. fusca, = consimilis Lec.
 - 118. A. fervida † Blanch. (nec Fabr.) is L. obesa Lec.
 - 119. A. puncticollis Blanch. is a race of fusca.
 - 120. A. fervens † Blanch. (nec Gyll.) is congrua Lec.
 - 121. A. uniformis Blanch. is L. EPHELIDA (Say).
 - 122. A. pruinosa ‡ Blanch. (nec Mels.) = L. futilis Lec.
 - 123. A. FRATERNA (Harris), correct.
- 124. A. KNOCHH Gyll.; correct for one \mathfrak{P} , sexual characters as in Profunda (rugosa Lec.). Under the same label are two specimens of another species allied to Prunina.
 - 125. A. crenulata † Blanch. is L. HIRTICULA (Knoch).
- 126. A. CRASSISSIMA Blanch, is a short stout species from Texas; the \Im sexual characters as in Fusca; \Im with last ventral segment semicircularly incised at tip; obesa Lec.
- 127. A. GLABERRIMA Blanch. My determination (Synopsis Journ. Acad. Nat. Sc. l. c. 242) is correct.
- 128. A. micans ‡ Blanch. (nec Knoch); two ♀ which seem to be L. CERASINA Lec. or an allied species.
- 129. A. diffinis Blanch. A very distinct species; & with the fixed spur of hind tibite clongated, and last ventral segment not impressed; antennal club very long.
 - 130. A. HIRSUTA Knoch, correct.
- 131. A. pilosicolis Knoch, is the race of L. TRISTIS (Fabr.), with the pubescence of the elytra longer than usual.
- 132. CREMASTOCHILUS HARRISH Kirby (Mus. Oxon.) has the prothorax shining, the front angles are rounded and auriculate, the sides are deeply impressed behind the front angles; the hind angles are not much retracted, surrounded by a deep sulcus; there is a patch of hair on the disk each side in front of the hind angles; the mentum is deeply notched behind.
- 133. My notes on Buprestidæ from the types of Gory and Laporte, now in the collection of Count Mniszech in Paris, have been partly utilized by Mr. Crotch in his "Notes on the species of Buprestidæ found in the United States" (Proc. Acad. Nat. Sc. Phil. 1873, p. 84). But it remains for me here to express the great obligations I am under to Count Mniszech, and to the other possessors of types which I had occasion to study, for the facilities

for comparison and the great personal kindness extended to me during my short visits to the larger cities of Europe.

- 134. DICERCA OBSCURA (Fabr.) Lec. is $B.\ lurida$ and consimilis Gory and Laporte.
 - 135. D. hilaris Lec. 9; manca Lec. 8, is tuberculata G. and L.
- 136. D. DISTINGUENDA G. and L. is colored like *hilaris*, but stouter, with the hind angles of prothorax less prolonged; probably a bright 5 specimen of D. TENEBROSA Kirby.
- 137. D. PRUINOSA G. and L. resembles LURIDA, but the prothorax is slightly wider behind; middle tibiæ 5 obtusely angulated on inner side; soror Lec.
 - 138. D. obscura † Gory is Baltimorensis (Herbst.) Lec.
 - 139. D. Scobina Chevr. is molitor Mels. and asperata L. and G.
 - 140. D. SPRETA G. and L. is impressifrons Mels.
- 141. D. TUBERCULATA Chevr. is Dumoulinii Gory; the prothorax is widely dilated on the sides as in crassicollis* Lec., and the disk is deeply excavated obliquely each side; the markings are irregular as in scobina.
 - 142. D. coryphæa 1 Dej. is a very large southern form of spreta.
 - 143. D. maculosa \(\pm \) Gory is LEPIDA Lec.
 - 144. D. erecta L. and G. is Pecilonota Cyanipes (Say).
 - 145. Ancylochira dilatata Motsch. is læviventris Lec.
 - 146. A. crenata Motsch. is Langii Mann.
- 147. A. VILLOSA n. sp. Elytra like AURULENTA, prothorax flattened, side margin thickened, disk with a broad dorsal stripe, and oblique space each side smooth; prothorax and under surface thinly clothed with long soft white hair. California, coll. Mniszech.
- 148. A. Apricans Herbst. A specimen was collected by Lorquin in California.
- 149. Melanophila luteosignata Dej. is a small variety of NOTATA with more convex prothorax.
- 150. Anthaxia bivittata L. and G. Not in our collections; nearly as elongate as Flavimana.
 - 151. A. ÆNEOGASTER L. and G. is expansa \circ and foreicollis \circ Lec.
- 152. Chrysobothris errans L. and G. is very near cuprofenea. L. and G. from Cayenne, and is probably from South America.
- 153. C. Alabamæ Gory is similar to the ordinary race of femo-RATA, but the prothorax is more narrowed behind and more deeply channelled; C. nigritula Gory is similar but more deeply punctured.

- C. difficilis Gory is also similar, but with the hinder impression of the elytra more sinuated, and is = rugosiceps Mels.
 - 154. C. ignipes Gory is SEXSIGNATA (Say).
- 155. C. Germari Gory seems to be a variety of the Mexican C. Solieri, and has not occurred thus far in the United States.
 - 156. C. Femorata (Fabr.) coll. Dej. is viridiceps Mels.
- 157. C. viridipunctata Gory is a variety of HYBERNATA in which the metallic green spot at the base of the elytra extends beyond the impression.
- 158. C. floricola Gory is Calcarata Mels. and femorata $^{+}_{+}$ L. and G.
 - 159. C. rugosula Gory is Actenodes Acornis (Say).
- 160. Actenodes bella Lee. does not differ from AUREONOTATA Gory, found in Cuba and South America; the locality of the specimen collected in Georgia is absolutely correct.
- 161. C. basalis Lee. is Atabalipa Gory and Colobagaster multi. stigmosa Mann.
 - 162. C. LESUEURI Gory is soror Lec.
 - 163. G. fastidiosa Gory is Lesueuri ‡ Lee.
- 164. C. quadriipressa Gory misella Lee. is a small variety of this species.
- 165. C. nigrofasciata ‡ Lee., Tr. Am. Phil. Soe., xi., 240, is quite different from the Mexican species, and from Melazona Gory; it may therefore be named Atrifasciata.
- 166. Polycesta obtusa Lec. seems to be VELASCO L. and G.; there is an error in the reference to the plate in my paper, it should be fig. 6, not 7.
 - 167. Acmæodera mima Gory is semivittata Lec.
- 168. A. PULCHELLA (Herbst.) Gory and dispar Gory are A. variegata and mixta Lee.
- 169. A. STELLARIS Chevr. is rubronotata Gory, hæmorrhoa Lee., and fasciatopunctata Chevr.
 - 170. A. Flavosticta & Sturm is croceonotata ‡ Lee.
- 171. A. CUPRINA Spin.; two specimens were collected in California, by Lorquin, one of which was kindly given to me by Count Mniszech.
 - 172. Mastogenius Solier is the same as Haplostethus Lec.
 - 173. Coræbus caliginosus Gory is a South American species.
- 174. Agrilus Nigricans Gory, size of Ruficollis, finely punctured, hind angles of thorax scarcely carinate.

175. A. PULCHELLUS Bland; I saw a specimen of this species from Texas, in the collection of Mr. Perroud, at Lyons; and in the same collection I saw two new species: 1, larger than ACUTIPENNIS, bronzed, coarsely punctured, hind angles of prothorax acutely carinated; 2, larger and stouter than MUTICUS Lec., more shining, bright green.

176. A. Couesii Lec. is aureus Chevr. and perlucidus Gory.

177. A. ZEMES Gory & is quadriguttatus Gory Q.

178. Brachys corvina Gory is lugubris Lec.

179. B. TESSELATA Fabr. is LÆVICAUDA Lec., according to Gory.

180. B. PRÆTEXTA Gory is the small black species resembling TESSELATA.

181. Phlegon herculeanus Lacordaire is South American, and must therefore be stricken from the List.

182. Adelocera sparsa Cand., quite distinct; not uncommon in California.

183. A. PROFUSA Cand., is cavicollis Lec.

184. Meristhus scobinula Cand. The Chinese specimens have the scutellum very strongly and acutely carinate; in the Mexican it is finely carinate, and in both the sides of the prothorax and the basal edge are not serrate.

185. Alaus gorgops Lec. is El. Lusciosus Hope, Griff. An. Kingd., 363, pl. 31.

186. Perimecus similis Kirby, size of M. communis, but a little narrower; prothorax more coarsely and sparsely punctured, scarcely impressed behind; third joint of antennæ narrower and shorter than fourth, about twice as long, but scarcely wider than second; hind angles of prothorax bicarinate.

187. Melanactes piceus. In the Oxford Museum I saw two specimens from the Lee collection labelled *E. aterrimus* Fabr. and one *E. lacunosus* Fabr.

188. ODONTONYX. There is a beautiful species of this genus from China in the Oxford Museum, in which the 3 has the antennæ ramose.

189. Telephorus mandibularis Kirby, is the smaller black species, with the prothorax more convex and feebly channelled, and the lustre obscured by very fine hairs. T. Franini Say is larger and has the prothorax more polished, and more deeply impressed.

190. Dasytes foveicollis Kirby belongs to Psilothrix.

191. Tillus picipennis White, B. M. Cat., from India, is the cosmopolitan Tarsostenus univitatus.

192. Hydnocera rufipes Newm. is a beautiful blue species, of the same form as humeralis, with the elytra very coarsely but not densely punctured, mouth, antennæ, and legs bright reddishyellow.

193. H. ÆGRA Newm. Quite distinct from any species in our collections. The prothorax is narrowed behind, constricted at each end; elytra shining, strongly punctured.

194. Driamerus Solier from Chili resembles strongly and is perhaps congeneric with Melyris cribratus Lec.

195. The Australian genus Omma Newm. is evidently allied to Cupes, especially to C serrata Lec., and is one of those curious examples of geographical distribution, of which we have already instances in Derataphrus, Nyctoporis, and Tmesiphiorus. A species of Cupes occurs in Japan, which, on the other hand, resembles C. concolor from the Atlantic States.

196. STAGETUS Wollaston should be compared with Protheca Lec. The resemblances between the Coleopterous fauna of North America and the Atlantic Islands are neither few nor unimportant.

197. Lebasiella pallipes Klug is nigripennis Lec., a Mexican species to be stricken from the list.

198. NYCTIPETUS. One of the most extraordinary instances that I have noticed, of resemblance which, if connected by geographical coincidence, would be termed mimicry, is between a Chilian species of this genus, living in arid plains, and AMPHIZOA LECONTEI Matthews, a subaquatic adephage found in Vancouver and Utah.

199. EMEAX SCULPTURATUS Pascoe, from Australia, is a species of Nyctoporis, barely different from N. Galeata Lec., which is found at San Diego, California, by the humeri being not dentiform, though the hind angles of the prothorax are rectangular and prominent.

200. Eleodes Tuberculata Mann, is viator Lec.

201. Eleodes subtuberculata Walker is GRANULATA Lec.

202. E. latiuscula Walker is humeralis Lec.

203. E. binotata Walker is sponsa Lec.

204. E. conjuncta and convexicollis Walker are obscura (Say).

205. Exerestus Bates is Rhinandrus Lec. (1862): E. Jansoni Bates is R. Elongatus Horn, from Nicaragua.

- 206. Polypleurus geminatus ‡Dej. according to the types in Mr. F. Bates's collection, is the smaller species with narrower prothorax.
- 207. According to Mr. F. Bates the genera Calcar, Zolodinus, and Centorus are exceptions to the ordinary structure of the ventral segments in the allied genera, the hind margin of the segments not being membranous, but entirely corneous, as in Asididæ.
- 208. TENEBRIO CASTANEUS, as pointed out to me by Mr. Bates, agrees with the genera just named in the ventral segments being entirely corneous, but is peculiar in having the eyes completely divided by the eyes as in Blapstinus. It evidently indicates a new genus, to be associated with the others as a distinct tribe, Calcarini.
- 209. PACHYURGUS ÆREUS (Mels.) seems to be *Encyalesthes brevicornis* Motsch., found in Java, Gilola, Malaysia; it is therefore to be stricken from the list.
- 210. EPHALUS Lcc. does not in the least resemble Leichenum, with which, it is united by Gemminger and Harold.
 - 211. Rhipidandrus Lec. I have seen a species from Guadaloupe in the collection of Mr. Sallé, to whom I am indebted for the remark that Melolontha paradoxa Beauv. is the same as R. flabellicornis. Vide No. 106.
 - 212. Ictistygma Pascoe, from Australia, seems hardly different from Eurygenius.
 - 213. Ischalia Pascoe (1860) is *Eupleurida* Lee. (1862). The North American species differs from the Bornean one chiefly in color, the latter being of a uniform indigo color, while the former is black and yellow.
 - 214. Macratria linearis Newm. The base of the prothorax is not narrower than the widest part in front of the middle, and the species does not seem to differ from the common M. MURINA.
 - 215. Eustrophus bicolor. The proper authority for this species is Say, the first describer; *Mycetophogus bicolor* Fabr. is probably a Platydema.
 - 215a. Scraptia. Several allied foreign genera have the eyes hairy like Xylophilus, Stereopalpus, etc.
 - 216. Anaspis collaris Lee, should be compared with the European A. Ruficollis.
 - 217. Toposcopus Lec. I saw in the collection of Mr. Fry an Australian species of this genus, and also a new genus having

like it divided eyes, but of broader form, with the ramus of third antennal joint as long as the others.

- 218. Meloe impressa Kirby; the prothorax is a little longer than broad, dull, sparsely punctured, elytra deeply rugose; color dark blue; & with the antennæ irregular.
- 219. M. NIGRA Kirby. Quite different, prothorax shorter, more convex, more punetured, head also more punetured, elytra less deeply rugose, abdomen extremely finely rugose; color nearly black.
- 220. Apate (Lepisomus) rufipennis and nigriceps Kirby are specimens of Polygraphus.
- 221. A. (L.) brevicornis Kirby is in such bad condition as to be not recognizable.
- 222. CERAMBYCIDE. My notes on this family have been employed in the parts of the classification, New Species, and List of North America Coleoptera relating to this family, with the exception of the few here detailed.
- 223. CLYTUS DECORUS Oliv. Oxford Museum; a species of Cyllene not in our collections.
- 224. CLYTUS CARINATUS Gory. Oxford Museum. Not in our collections; perhaps South American.
- 225. CLYTUS COMPRESSICULIS GOTY, like VERRUCOSUS, but with prothorax much more compressed and elevated; perhaps an individual variation.
- 226. CLYTUS ANTENNATUS White, Brit. Mus. Cat., 252, is Arhopalus eurystethus Lee.
- 227. Phyton Pallidum (Say). A specimen in the British Museum is labelled maculatum Oliv. (Saperda), but it agrees so little with the description that we are not warranted in adopting the synonymy.
 - 228. Stenaspis unicolor Dupont is Cer. solitarius Say.
- 229. Elaphidion arctum Newm. is the common small narrow species with the antennal spines short, and the elytral spines long, and was considered by Dejean as E. VILLOSUM Fabr.
- 230. E. VILLOSUM (Fabr.) Newm. is putator Peck, pruinosum (†Dej.) Guérin.
- 231. Agennopsis Thomson is Talwopora ‡Dej., Adetus Lee. The type given me by Dr. Melsheimer (Polyopsia analis Hald.) is Brazilian, and not North American.
 - 232. Psenocerus supernotatus (Say.), Acharis lunifera †Dej.